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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
09/918,969	07/30/2001	Roger Stringham	2923.03-2.1

CONFIRMATION NO. 3144

OC000000013209400

Brian I. Marcus, Esq.
Vierra Magen Marcus Harmon & DeNiro LLP
685 Market Street,
Suite 540
San Francisco,, CA 94105

Date Mailed: 07/12/2004

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/30/2002.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Mary A. Holmes

MARY A HOLMES
3600 (703) 305-0234

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09/918,969	07/30/2001	Roger Stringham	2923.03-2.1

CONFIRMATION NO. 3144

OC000000013209371

24001
FINLEY & BERG, LLP
455 MARKET STREET
SUITE 1940
SAN FRANCISCO, CA 94105-2448

Date Mailed: 07/12/2004

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/30/2002.

- The Power of Attorney to you in this application has been revoked by the applicant. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Mary A. Holmes

MARY A HOLMES
3600 (703) 305-0234

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09/918,969	07/30/2001	Roger Stringham	2923.03-2.1	3144

7590 07/12/2004

EXAMINER
BEHREND, HARVEY E

ART UNIT	PAPER NUMBER
3641	

Brian I. Marcus, Esq.
Vierra Magen Marcus Harmon & DeNiro LLP
685 Market Street,
Suite 540
San Francisco,, CA 94105

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/918969	Stringham
Examiner	**Group Art Unit**
Behrend	3641

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE one MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☒ Responsive to communication(s) filed on 7/30/02.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-30 is/are pending in the application.

Of the above claim(s)____ is/are withdrawn from consideration.

☐ Claim(s)____ is/are allowed.

☐ Claim(s)____ is/are rejected.

☐ Claim(s)____ is/are objected to.

☒ Claim(s) 1-30 are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number)____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received:____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).____

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other____

Office Action Summary

1. It appears from applicant's 7/30/02 response, that applicant has misinterpreted some portions of the 5/2/02 Office action.

Accordingly, the 5/2/02 Office action is withdrawn and the following substituted therefor. Any inconvenience to applicant is regretted.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-22, 25-30 drawn to an invention, classified in class 376, subclass 146.

II. Claims 23, 24 drawn to an invention, classified in class 376, subclass 100.

The inventions are distinct, each from the other because:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another materially different process such as a process for transmuting radioactive waste as referred to in the Hagelstein document referred to on pages 2 and 3 of the instant application.

3. Upon election of one of the inventions identified above as I and II, applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable (currently, no claim is generic):

A. The arrangement as illustrated in Fig. 1.

B. The arrangement as illustrated in Fig. 4.

C. The arrangement as illustrated in Fig. 5.

D. The arrangement as illustrated in Fig. 6.

E. The arrangement as illustrated in Fig. 7.

4. Upon election of one of the species identified above as A-E, applicant is further required under 35 U.S.C. 121, to elect a "single" ultimate species of energy source (for example, a single particular type of mechanical energy source, a single particular type of sonic energy source, etc.) for purposes of examination. This is to facilitate examining due to the numerous types of energy sources disclosed and claimed as being suitable (e.g. see claims 2, 8, 26, and the specification on page 5 line 19 to page 6 line 11). Note that the selection of a whole class of energy sources (e.g. all mechanical energy sources, is not on election of a "single energy source".

5. Upon election of one of the species identified above as A-E, applicant is further required under 35 U.S.C. 121 to elect a "single" ultimate species of reactant material (e.g. H_2, H_2O, D_2O, etc., including any liquid it may be in) (and if in compound, composition or mixture form, the exact constituents of said compound, composition or mixture), for purposes of examination. This is to facilitate examining due to the broad range of materials disclosed and claimed as being suitable (e.g. see claim 1 and the specification on page 7 lines 13+).

Applicant in the 7/30/02 response has misinterpreted this requirement as requiring applicant to elect a broad class of reactant materials, re applicants indication on page 3 of the 7/30/02 response that applicant is electing all embodiments containing

D_2O. Clearly, the election of all embodiments containing D_2O is not the election of a single specie as required by the language utilized by the examiner in section 4 of the 5/2/02 Office action. The examiner employed the specific language set forth in said paragraph 4 of the 5/2/02 Office action to preclude the election of a broad class of reactant materials, instead of a single reactant material.

Thus, if applicant desires to elect a particular mixture, composition, etc., containing D_2O, all constituents of said particular mixture, composition, etc., must be recited/identified, to comply with the election of species requirement set forth in section 5 of the present Office action.

6. Applicant on page 4 of the 7/30/02 response has traversed the election of species requirement set forth in section 5 of the 5/2/02 Office action on the basis that there is no patentable difference between the respective catalytic materials and requests that said election requirement be withdrawn. The election requirement set forth in said section 5 of the 5/2/02 Office action is accordingly withdrawn.

7. Applicant on page 4 of the 7/30/02 response has traversed the election of species requirement set forth in section 6 of the 5/2/02 Office action on the basis that there is no patentable difference between the respective physical forms of catalytic materials and requests that said election requirement be withdrawn. The election requirement set forth in said section 6 of the 5/2/02 Office action is accordingly withdrawn.

8. Applicant on page 5 of the 7/30/02 response has traversed the election of species requirement set forth in section 7 of the 5/2/02 Office action on the basis that

there is no patentable difference between the respective liquid forms of reactant materials and requests that said election requirement be withdrawn. The election requirement set forth in said section 7 of the 5/2/02 Office action is accordingly withdrawn.

9. Upon election of one the species identified above A-E, applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable (currently, no claim is generic).

M. Wherein the means for conducting heat includes a circulation system and a heat exchanger.

N. Wherein the means for conducting heat includes bimetallic thermo-electric means.

10. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species, which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harvey Behrend whose telephone number is (703) 305-1831. The examiner can normally be reached on Tuesday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4195.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Behrend/kl
October 30, 2002

HARVEY E. BEHREND
PRIMARY EXAMINER